Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Section 6002(b) of	)	
the Omnibus Budget Reconciliation	)	
Act of 1993	)	WT Docket No. 05-71
	)	
Annual Report and Analysis of	)	
Competitive Market Conditions With	)	
Respect to Commercial Mobile Services	)	

COMMENTS OF CTIA-THE WIRELESS ASSOCIATION™

Michael Altschul
Senior Vice President and General Counsel

Carolyn W. Brandon
Vice President, Policy

Robert F. Roche, Ph.D.
Vice President, Research

CTIA-THE WIRELESS ASSOCIATION™
1400 Sixteenth Street, N.W.
Suite 600
Washington, D.C. 20036
(202) 785-0081

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SUMMARY

In these comments, CTIA-The Wireless Association™ ("CTIA") responds to the Commission's request for information regarding the state of competition in the wireless industry for incorporation into the Tenth Annual CMRS Competition Report.

The data available from a number of public sources demonstrates that the wireless industry remains highly competitive, providing innovation, choice and competitive prices to consumers. The wireless industry has attracted a record number of new subscribers and wireless subscribers are steadily increasing their minutes of use. This consumer behavior demonstrates the competitiveness of the wireless industry – there is no evidence that carriers are restricting output, slowing innovation, or raising prices.

It is imperative the Commission view this data in the proper light. Competition is not to be equated with a specific number of competitors in a market, rather it is to be found in the marketplace – in its operations, in the carrier and customer behaviors manifested, and consumer benefits generated. According to noted economist Professor Michael Katz:

> The concept of effective competition is best understood within the context of specific policy questions. *Markets are rarely perfectly competitive. But they often are competitive enough that extensive government intervention is unwarranted.* Therefore, setting an absolute competitive threshold or benchmark in the absence of a specific policy question can be misleading. Setting such a threshold runs the risk of suggesting that intervention is warranted whenever a market fails to attain that benchmark, when, in fact, governmental intervention in even imperfectly competitive markets may harm consumers.

Wireless companies are doing something right by wireless consumers – and consumers are recognizing that fact by using more amounts of traditional wireless

services, and adopting new service offerings, from SMS to picture-messaging, and various entertainment features.

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COMMENTS OF CTIA-THE WIRELESS ASSOCIATION™

CTIA-The Wireless Association™ ("CTIA")[1] hereby submits the following comments in response to the Federal Communications Commission's ("Commission" or "FCC") February 24, 2005 *Public Notice* requesting data and information regarding the status of competition in the CMRS industry, including "the indicators of competition for the next report to Congress . . . to assist in determining whether or not there is effective competition in the CMRS market."[2] Aggregate market data reveals that the wireless

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[1] CTIA is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the organization covers all Commercial Mobile Radio Service ("CMRS") providers and manufacturers, including cellular, broadband PCS, ESMR, as well as providers and manufacturers of wireless data services and products.

[2] *WTB Seeks Comment on CMRS Market Competition*, WT Docket No. 05-71, DA 05-487, released February 24, 2005 (hereinafter "Notice"). Section 332(c)(1)(C) of the Telecommunications Act requires the FCC to conduct an annual review of competitive market conditions in the CMRS marketplace, and produce an annual report analyzing those conditions, that must include "an identification of the number of competitors . . . , an analysis of whether or not there is effective competition, an analysis of whether any of such competitors have a dominant share of the market for such services, and a statement of whether additional providers or classes of providers in those services would be likely to enhance competition."

industry has attracted a record number of new subscribers and wireless subscribers are steadily increasing their minutes of use.[3] This consumer behavior demonstrates the competitiveness of the wireless industry – there is no evidence that carriers are restricting output, slowing innovation, or raising prices. Wireless companies are doing something right by wireless consumers – and consumers are recognizing that fact by using more amounts of traditional wireless services, and adopting new service offerings, from Short Message Service (SMS) to picture-messaging, and various entertainment features, with Multimedia Messaging Services (MMS) a new and growing prospect for consumers.

With respect to the data collection requested by the Commission in the Notice soliciting comments, CTIA reminds the Commission that granular-level information about carrier conduct and consumer behavior is highly sensitive, and that the cost of collecting and reporting such information may be both significant and prohibitive for many providers involved in delivering wireless service.[4] Therefore, CTIA continues to urge the Commission to be careful and not force carriers to devote substantial resources

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[3] *See e.g.*, David Janazzo, *et al*., "US Wireless Services, US Wireless matrix 4Q 04," *Merrill Lynch*, March 4, 2005, at 27, 28, and 38 (documenting increasing MOUs and falling per minutes prices). *See also* the results of CTIA's Semi-Annual Wireless Industry Survey regarding wireless investment, employment, subscribership, traffic measures, and other key indicators at http://www.ctia.org/research_statistics/statistics/index.cfm/AID/10030.

[4] As Terry Addington, CEO of First Cellular of Southern Illinois, and now Chairman of CTIA, observed: "Our website gives you all of our pricing. It gives all of our services. . . . but revenue [is] very, very sensitive, net income very sensitive. . . . I do want to work with you on your desire for information, but . . . . I don't need it to be something that becomes more important than the customer." Statement of Terry Addington, CEO, First Cellular of Southern Illinois, at Federal Communications Commission Public Hearing for 7th Annual CMRS Competition Report, February 28, 2002. *See Transcript at* http://wireless.fcc.gov/services/cmrs/presentations/020228.pdf, at 111-112.

to the compilation and submission of data that is already available on industry websites, press releases, and in readily available third-party sources.[5] Public data, and aggregate industry data, demonstrates that the wireless industry is indeed vibrantly competitive, and that wireless carriers across the country – including carriers in rural markets – are both investing in and delivering to consumers advanced wireless services.

With these comments, CTIA responds to the FCC's Public Notice and request for information to help the Commission and Congress better understand the state of competition in the wireless industry.

I. Market Structure and Criteria for Analyzing Effective Competition

According to noted economist, Professor Michael Katz:

> The concept of effective competition is best understood within the context of specific policy questions. *Markets are rarely perfectly competitive. But they often are competitive enough that extensive government intervention is unwarranted.* Therefore, setting an absolute competitive threshold or benchmark in the absence of a specific policy question can be misleading. Setting such a threshold runs the risk of suggesting that intervention is warranted whenever a market fails to attain that benchmark, when, in fact, governmental intervention in even imperfectly competitive markets may harm consumers. [6]

The Commission seems to agree with this perspective. In the *Memorandum Opinion and Order* approving the merger of AT&T Wireless and Cingular Wireless the Commission noted that:

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[5] *See* Comments of the Cellular Telecommunications & Internet Association, In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, WT Docket No. 04-111, filed April 26, 2004, at 3 (CTIA 2004 Competition Comments).

[6] Michael L. Katz, "Measuring Competition Effectively," filed with Reply Comments of CTIA in WT Docket No. 04-111, May 10, 2004, at 3.

> In general, competition depends on consumers having choices among products or services that are fairly good substitutes for each other. If consumers have such choices, a single provider cannot raise its prices above the "competitive" level because consumers will switch to a substitute.[7]

The Commission went on to note:

> The level of competition depends on what products or services are substitutes for each other (product market), where those substitute products are available (geographic market), what firms produce them (market participants), and what other firms might be able to produce substitutes if the price were to rise (market entry)

After conducting an exhaustive review of a variety of industry metrics, the Commission concluded that in the wireless industry:

> Carriers compete vigorously on the basis not only of price but also [on the basis] of other plan features, call quality and geographic coverage, and customer service. . . . Firms differ in dimensions such as network quality, thoroughness of local geographic coverage, and scope of national coverage. They compete both on price and on numerous non-price features. Dynamic rivalry is ongoing as well, with firms competing via research and development, and via investment in new infrastructure and services.[8]

Thus, as recently as October 2004, the Commission determined that the wireless industry exhibited "dynamic" competition. As noted above, the best indicia of competition are reflected in marketplace performance – in its operations, in the carrier and customer behaviors, and consumer benefits provided. The following details the

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[7] *Memorandum Opinion and Order*, In the Matter of Applications of AT&T Wireless Services, Inc., and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations, WT Docket No. 04-70, et al., FCC 04-255, (released October 26, 2004) at para. 57.

[8] Id. at paras. 116, 123.

performance of the wireless industry according to the performance metrics which the Commission and economists have indicated are the most telling; investment, innovation, customer choice, and the ability of customers to exercise those choices.

A. Capital Expenditures

The wireless industry has continued its ongoing investments in the networks and other facilities needed to deliver wireless service – with almost $174 billion in cumulative capital investment reported as of year-end 2004.[9] On an incremental basis, Merrill Lynch's *Global Telecom Weekly* reported on March 21, 2005 that they estimated approximately $22.3 billion was invested in the U.S. by wireless carriers in 2004.[10] Moreover, Merrill Lynch estimates that investment in the U.S. wireless industry will continue at more than $24 billion a year from 2005 through 2006.[11] In fact, CTIA's own investment figure excludes the more than $22 billion which companies have paid to the U.S. government for CMRS spectrum licenses (since the first such auctions), inclusion of which increases wireless companies' reported investment in delivering wireless services to almost $200 billion by year-end 2004.

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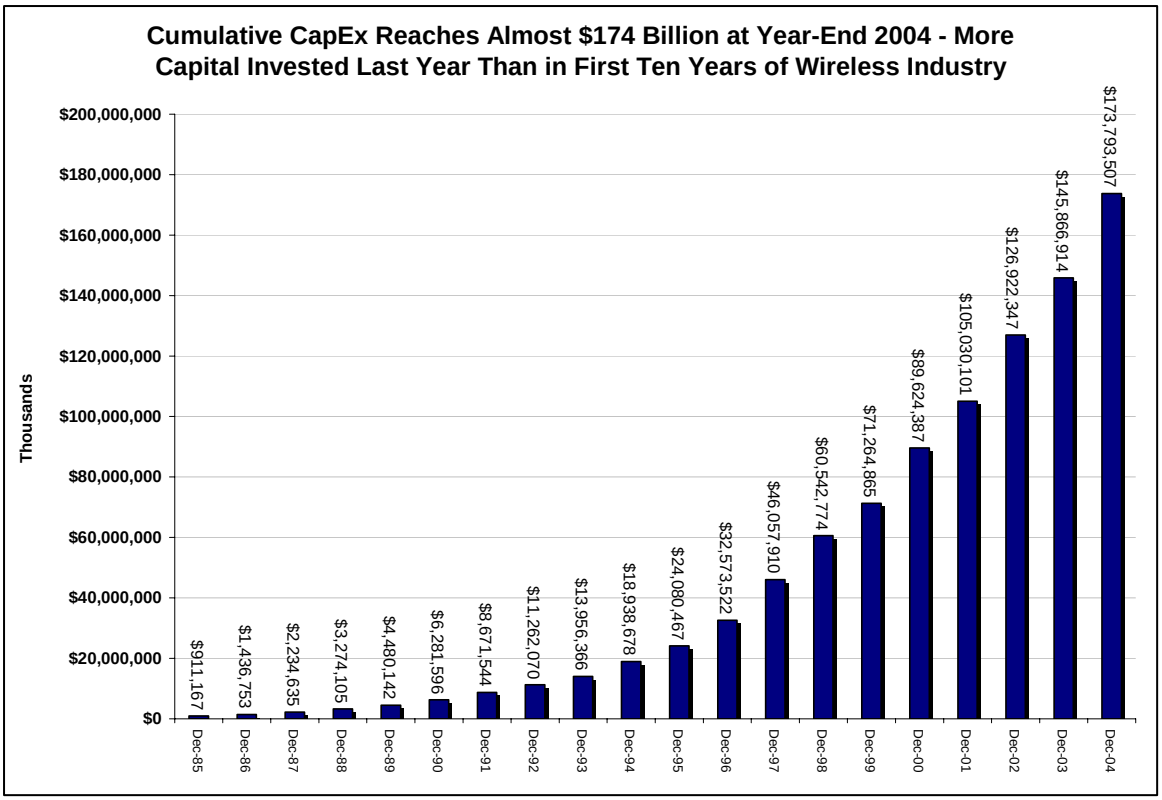
9 *See* CTIA Semi-Annual Wireless Industry Survey, *op cit*.

10 Glen Campbell, "Global Telecom Weekly," *Merrill Lynch*, March 21, 2005, at Table 4 "Global Telecom Capex." *See also* David Janazzo, *et al*., "US Wireless Services, US Wireless matrix 4Q 04," *op cit.*, at 1, projecting a 10 percent capital investment increase in 2005.

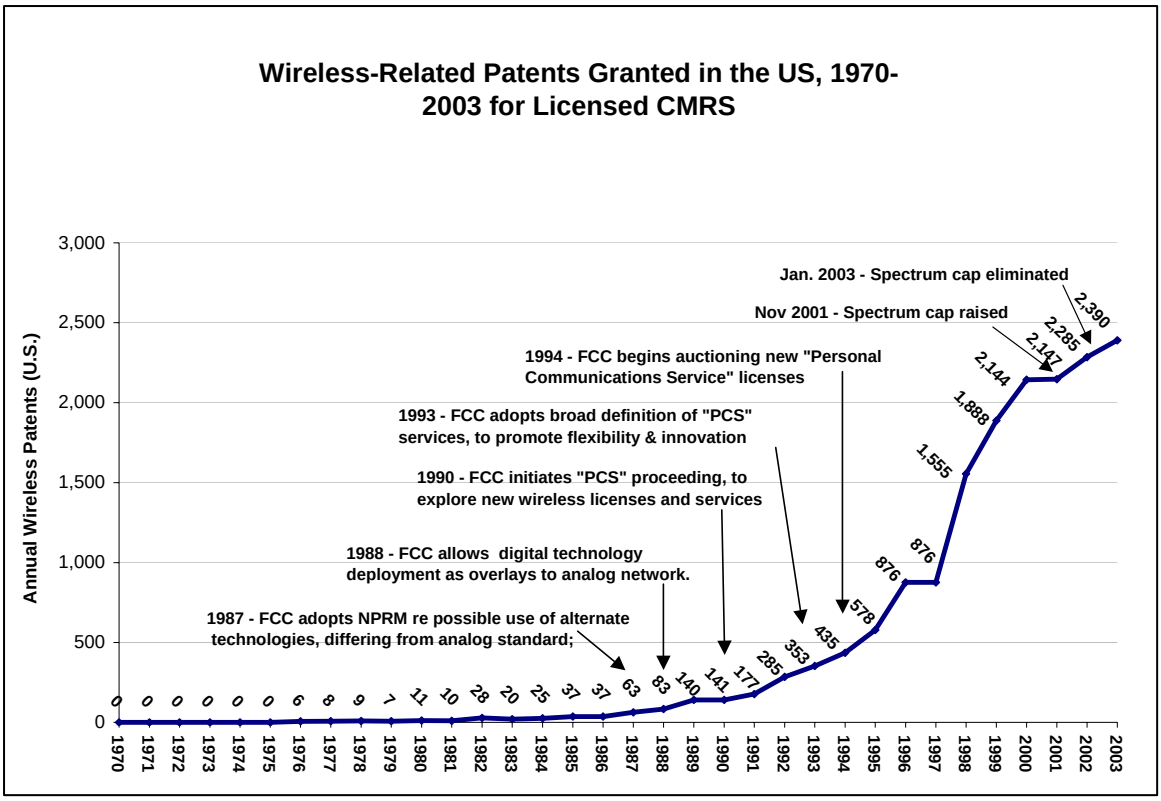
11 *Id.*



B. Innovation, Technology Deployments, and Upgrades

Review of the U.S. Patent Office's library of granted patents, originally via Lexis and subsequently through review of the patent grants which that office maintains online, reflects a clear upward trend in the patenting of devices and applications related to licensed wireless.[12] The pattern correlates with FCC decisions that have enabled wireless companies to innovate and compete more vigorously (*e.g.*, authorizing digital technologies as overlays to existing analog cellular systems, issuing more licenses, lifting spectrum caps, etc.).

[12] *See e.g.,* Robert F. Roche, "Options and Implications of U.S. Competition Policy: The Case of Wireless Telecommunications" (Ph.D. diss., George Washington University, 1997), at 213.



The on-going innovation in the wireless industry is manifest not only in the U.S. Patent Office's records, but also in the visible and quantifiable implementation of new products and services. Wireless carriers have deployed digital technology across the country – indeed, 96 percent of reported wireless subscribers were digital users as of year-end 2004, according to CTIA's latest survey results. Companies like ACS Wireless of Alaska are deploying advanced technologies, like EV-DO, that deliver new capabilities to wireless consumers.[13] Companies both large and small are expanding their

[13] *See also* Mike Dano, "Alltel launches EV-DO service in 3 markets," *RCR Wireless News*, March 28, 2005, at http://www.rcrnews.com/news.cms?newsId=21989; and see Mike Dano, "MetroPCS offers international text messaging," *RCR Wireless News*, March 28, 2005, at http://www.rcrnews.com/news.cms?newsId=21990.

service offerings well beyond voice, reflected in the recent proliferation of camera phones, and the deployment of video-capable phones and mobile TV by companies like Cingular, Midwest Wireless, Sprint, and Verizon Wireless.[14]

As both the *Ninth Report* and the *Memorandum Opinion and Order* on the Cingular-AT&T Wireless merger noted, wireless carriers across the country have been deploying new generations of wireless technology as overlays to their pre-existing networks. Examples of such advanced network overlays, and of the active deployment of wireless broadband technology, include:

- **ACS Wireless** of Alaska launched wireless broadband over its CDMA network, offering access at up to 2.4 Mbps over CDMA EV-DO, as well as other voice and data applications, stressing that this is "the fastest available wide area wireless data service available to Alaskans today," and that it is "proof that we are committed to leading the industry in the delivery of the best wireless data technology, with superior coverage and services – offering a combination of superior technology and value to our customers."[15]

- **Aloha Partners**, a 700 MHz licensee, will also launch a trial of Flarion's wireless technology in 2Q 2005, to support what it describes as "services to rural homes without access to wired broadband services and public safety responders who need mobility and wireless access" as well as "state and local governments, public safety and security agencies."[16]

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14 *See* "Connected on the Go: Broadband Goes Wireless," Report by the Wireless Broadband Access Task Force, FCC, February 2005, at 37-38.

15 *See* http://biz.yahoo.com/bw/040616/165283_1.html.

16 *See* "Aloha Partners Launches Market Trial of Flarion's FLASH-OFDM Technology to Offer Mobile Broadband to Public Safety and Rural Homes," OFDM News, at http://www.ofdmnews.com/publications/page362-1350903.asp. See also Kevin Fitchard, "Flarion to trial OFDM gear with Aloha Partners," TelephonyOnline.com, Oct. 14 2004; *and see* "Aloha Partners Beefs Up 700 Mhz Holdings," February 11, 2005, at http://hightechmagazine.com/ManageArticle.asp?C=100&A=5953.

- **Cellular One of Amarillo** is deploying Flarion's "Flash-OFDM" technology in a trial involving a 100 square mile area around Amarillo, TX, with further expansion to follow.[17]

- **Cellular South** (which provides service from Mississippi to coastal Alabama and the Florida panhandle), has deployed digital technologies from CDMA 1XRTT to CDMA EV-DO, while GSM technology has been chosen by Highland Cellular as they have migrated from the original analog AMPS standard prescribed by the FCC in 1981 through the digital TDMA standard, forward through the next-generation General Packet Radio service (GPRS) or new generations of CDMA-based services.[18]

- **Cingular** proposes a transition from EDGE to Universal Mobile Telecommunications Systems ("UMTS") that will initially permit data transmission speeds of up to about 2 mbps and eventually, when upgraded with High Speed Downlink Packet Access ("HSPDA") at speeds of up to 14.4 mbps.

- **Sprint** plans to upgrade its nationwide wireless network by 2006 so that consumers can experience data speeds of approximately 300-500 kbps. Using EV-DO, Sprint is offering high-speed services in select markets this year and will spend $3 billion over the next three years to upgrade its U.S. wireless network. The upgrades to Sprint's network includes options for EV-DV.

- **Verizon Wireless** has launched an advanced wireless network utilizing CDMA2000 1xEV-DO ("Evolution-Data Only") technology initially in Washington, DC and San Diego and has since expanded its BroadbandAccess network to reach approximately 75 million Americans. Verizon's EV-DO has typical download speeds of 300-500 kbps with peak speeds of up to 2 mbps, and typical upstream speeds of 40-60 kbps.

The National Telecommunications Cooperative Association's 2004 Wireless Survey report, published in December 2004, notes that of their survey respondents "providing CMRS services, 32% each utilize TDMA, CDMA, and GSM, and 5% AMPS. Of the 37% utilizing either TDMA or AMPS, all indicated that they intend to upgrade

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17 *See* Kurt Mackie, "Cellular One of Amarillo Deploys Flarion's Radios," December 7, 2004, at http://www.shorecliffcommunications.com/magazine/news.asp?news=4032.

18 *See* http://www.acsalaska.com/cdma/index.stm and http:/www.cellularsouth.com; *see also* http://www.cellularoneweb.com/about_us.cfm (re Highland Cellular).

within the next 12 months, with GSM preferred over CDMA by a three to two margin."[19] UBS also expects spending on 3G technologies to grow in 2005-2006, based on carrier announcements of advance network build-out plans, with capex expected to rise by 11 percent in 2005.[20]

C. Effects of Consolidation

The Commission addressed the potential effects of consolidation in the *Memorandum Opinion and Order* it adopted approving the Cingular-AT&T Wireless merger late last year. In its decision, the Commission noted the issues which would give rise to concern over the state of competition in the wireless industry. The Commission noted that its analysis included not only traditional antitrust considerations, but also whether mergers would "accelerate the decline of market power by dominant firms in the relevant communications markets and the merger's effect on future competition" including the potential to "reduce transaction costs and offer new products" or to "create market power, create or enhance barriers to entry by potential competitors, and create opportunities to disadvantage rivals in anticompetitive ways."[21] After conducting its market-by-market analysis, the Commission concluded that "while the structure of the[] markets [in which Cingular Wireless and AT&T Wireless operations would merge] will change as a result of the transaction, we find that carrier conduct will remain sufficiently

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19 "NTCA 2004 Wireless Survey Report," December 2004, at 11, on-line at http://www.ntca.org/content_documents/NTCA_2004WirelessSurveyReport.pdf.

20 *See* "UBS Telco Wake Up Call," November 29, 2004.

21 *Memorandum Opinion and Order,* In the Matter of Applications of AT&T Wireless Services, Inc., and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations, at paras. 41-42.

competitive to ensure that market performance will not be impaired, and, given the expected benefits, the public interest will be enhanced on balance."[22]

While consolidation has occurred as a result of both mergers and acquisitions, and as a result of bankruptcies, the effect of these consolidations has been to create stronger competitors, and make possible the on-going deployment of new technologies and the provision of more services to consumers. More than 180 companies continue to compete across the country in offering wireless service, ranging from small one-market licensees to nationwide and regional providers. Moreover, while consolidation is occurring at some levels, so too is new entry, in the form of 700 MHz licensees like Aloha Wireless, as well as the variety of companies which have taken advantage of the Commission's spectrum leasing rules, and companies which have acquired spectrum both at Commission auction and in private-sector transactions.[23] In fact, the Commission's Order approving the Cingular –AT&T Wireless merger noted that:

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22 *Id.* at para. 269.

23 *See* "Aloha Partners Launches Market Trial of Flarion's FLASH-OFDM Technology to Offer Mobile Broadband to Public Safety and Rural Homes," OFDM News, at http://ww.ofdmnews.com/publications/page362-1350903.asp (describing plans of nation's largest 700 MHz licensee). *See also* Tole Hart and Ron Cowles, "Verizon and MetroPCS Lead in FCC Spectrum Auctions," Gartner, February 18, 2005, at http://whitepapers.bcr.com/detail/RES/1109010873_957.html; "MetroPCS sells SF spectrum to Verizon for $230M", IT Managers Journal, March 3, 2005, at http://eyeonit.itmanagersjournal.com/article.pl?sid=05/03/03/1840219&tid=107&tid=46&tid=105 (noting MetroPCS' purchase of spectrum from Cingular, as well as sale of some spectrum to Verizon Wireless); and "Verizon Wireless, metroPCS Win New Spectrum," July 8, 2004, at http://www.phonescoop.com/news/item.php?n=910 (describing results of private sale of Nextwave spectrum). *See also* Comments of CTIA in the Matter of Facilitating the Provision of Spectrum-Based Services in Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services, WT Docket No. 02-381, filed January 14, 2005, at 9-10

> The development of significant regional variation in the number of operators reflects a shift from the restrictive cellular licensing rules to a more flexible licensing policy that reduces entry barriers associated with government control of spectrum availability and allows market forces to play a greater role in determining the number of competitors in a given geographic area.[24]

D. Rural Markets

Wireless in particular offers opportunities for economic growth and productivity in rural America.[25] Dennis Miller, CEO of Midwest Wireless, recently told the U.S. House of Representatives' Rural Caucus during a hearing on telecommunications and rural America: "The best thing the FCC and Congress can do to protect the health and safety of rural Americans is to ensure that critical infrastructure continues to be built out in rural communities. . . ."[26] As Mr. Miller noted in his testimony:

> As a rule, our nation's rural areas have long trailed cities in terms of economic development. Use of high-cost support to improve infrastructure has a significant economic impact on small communities

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(reviewing record of spectrum manager and spectrum leasing applications which had been granted as of that date).

24 *Memorandum Opinion and Order*, In the Matter of Applications of AT&T Wireless Services, Inc., and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations, at para. 61.

25 As Lauren Van Wazer, co-chair of the FCC's Wireless Broadband Access Task Force, observed: "Broadband is a catalyst for economic development. It can bring the resources of the world into areas that are more remote." Heather Forsgren Weaver, "Wireless in rural America centers on cost, not technology," *RCR Wireless News*, March 28, 2005, at 12.

26 Written Statement of Dennis Miller on Behalf of Midwest Wireless and the Rural Cellular Association, House Rural Caucus Telecommunications Task Force Briefing on the Future of Telecommunications Policy and the Universal Service Fund in Rural America, February 2, 2005, at 8.

> and is a key to closing that gap. Today, many companies and people consider rural areas as more attractive places to live and one of the major factors in selecting a community is the quality of its telecommunications infrastructure. Wireless service is a very important factor in the equation. More and more companies and people rely on wireless phones to improve efficiencies and manage their businesses. Federal high-cost support has permitted Midwest Wireless to expand service and add cell towers that has resulted in a drastic change in the way rural communities do business. For example, Mike Peters, who runs a van service in Harmony, Minnesota, says [the addition of new towers] is "A huge help. I'm on the road all the time and it's an absolute necessity for my customers to reach me. The coverage is excellent now." Amy Geiwitz of Houston, Minnesota, who runs a day care center, says "Now, when I go walk with the kids, I can take my phone with me and their parents or my kids can get a hold of me. It's great. We needed this tower."[27]

Over the past few years, wireless licensees both big and small have been deploying advanced technologies across the country, and analysts expect investment in new 3G technologies to increase over the next two years.[28] Thus, while 96 percent of reported wireless subscribers at large are using digital technologies, reported subscribership for small and rural operators is also overwhelmingly digital.[29] First Cellular of Southern Illinois, a rural carrier in Southern Illinois, was the first carrier to offer ring-back service to consumers in the U.S., setting a trend followed by national

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27 *Id.* at 8-9.

28 *See e.g.,* The Comments of CTIA-The Wireless Association™, In the Matter of Wireless Broadband Access Task Force Request for Public Comment on Issues Related to the Federal Communications Commission's Wireless Broadband Policies, GN Docket No. 04-163, filed June 3, 2004 (identifying companies deploying advanced wireless technologies). *See also* "UBS Telco Wake-Up Call," November 29, 2004 ("US wireless spending on 3G technologies is poised for growth in 2005-06").

29 *See CTIA-Semi-Annual Wireless Industry Indices* report (forthcoming edition), at Section 2.2 (Reported Digital Subscribers).

operators T-Mobile USA and Verizon Wireless.[30] Midwest Wireless also provides a variety of Internet access service offerings, including ClearWave™ Mobile, an always-on network capable of delivering data at speeds up to 70kbps, as well as a high-speed Internet fixed-wireless service which delivers data at speeds up to 768kbps.[31] Text messaging, ring-tones, picture-messaging, and a variety of information and entertainment options are being offered by carriers in rural and urban markets across the country.[32]

It should also be kept in mind that multi-system / multi-market operators are active in providing service in both rural and urban / suburban areas within their markets, and that this interest and engagement has led to the expansion of service in both unserved and previously underserved areas, such as tribal lands and more remote locations, sometimes through the use of both company capital and universal service fund-derived moneys. Companies like Cellular South, Guam Cellular, Highland Cellular, Virginia Cellular, and others have used such funding to deploy advanced technologies that are

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30 Colin Gibbs, "Ringback Race Starts in U.S.," *RCR Wireless News*, March 28, 2005, at 1.

31 *See* http://www.midwestwireless.com/Home/DataServices/HighSpeedInternet/.

32 Descriptions of these offerings appear on many wireless carriers' websites. *See e.g.*, the description of service options on the websites of Alaska Communications Systems (ACS Wireless) at http://www.acsalaska.com/consumer/c-wireless/index.stm (including how their EV-DO network supports Internet access, and multiple messaging options); Appalachian Wireless at http://www.appwireless.com/ (including Push-to-Talk); Blackfoot Communications at http://www.blackfoot.net/wireless/; SRT Wireless at http://www.srt.com/wir_template.cfm?subpage=wir_pcs&subcontent=plans; Thumb Cellular at http://www.thumbcellular.com/; U.S. Cellular at http://www.uscc.com/uscellular/SilverStream/Pages/x_page.html?p=features (including their "**easy**edge^{SM}" enhanced wireless services offerings); etc.

capable of supporting both basic and advanced services.[33] As a result, consumers in markets across the United States and its territories are receiving commitments from these and other wireless companies for the extension and delivery of service.[34] These companies are committed to offering innovative and competitive services based on evolving technology platforms – which demand that they invest millions of dollars every year to upgrade and extend their networks to bring the latest in infrastructure and applications to consumers.[35]

As discussed above, the wireless industry has a tremendous and unprecedented track record in rapidly bringing high-quality, affordable telecommunications services to

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[33] *See e.g., Order, Federal-State Joint Board on Universal Service, Guam Cellular and Paging, Inc., d/b/a Saipancell Petition for Designation as an Eligible Telecommunications Carrier on the Islands of Saipan, Tinian, and Rota in the Commonwealth of the Northern Mariana Islands*, CC Docket No. 96-45, DA 04-2268, released July 23, 2004, at para. 16 ("Saipancell has committed to serve residences that do not have access to the public switched network through the incumbent telephone company," and will provide residents "with new services comparable to those provided in urban areas, including mobility, basic voicemail, voice message notification, numeric paging, call forwarding, three-way calling, call waiting, premium voice mail, voice dial, and two-way Short Message Service."). *See also Memorandum Opinion and Order, Federal State Joint Board on Universal Service, Cellular South License, Inc. Petition for Designation as an Eligible Telecommunications Carrier Throughout its Licensed Service Area in the State of Alabama*, CC Docket No. 96-45, DA 02-3317, released December 4, 2002.

[34] *Memorandum Opinion and Order, Federal-State Joint Board on Universal Service, Virginia Cellular, LLC Petition for Designation as an Eligible Telecommunications Carrier in the Commonwealth of Virginia*, CC Docket No. 96-45, FCC 03-338, released January 22, 2004, at paragraph 16.

[35] *See e.g.*, the announcements of Midwest Wireless and Cellular South regarding their investments in network upgrades and new services at http://www.midwestwireless.com/Home/Newsroom/Archives/NEWSROOM.htm and http://www.cellularsouth.com. *See also* Rhonda Wickham, "Down Home in the Cellular South, Tier III carrier prides itself on voice value and premium customer service," *Wireless Week*, March 22, 2004.

consumers located in rural areas. This track record would be even more impressive if the Commission took steps to enforce existing rules and statutes meant to ensure that wireless carriers can compete on an even footing against wireline incumbent local exchange carriers in rural areas. CTIA, for example, has urged the Commission to expeditiously reform the intercarrier compensation system that currently results in a significant and unjustified flow of implicit subsidies from wireless carriers to (primarily rural) incumbent LECs.[36] CTIA intends to continue actively participating in the Commission's ongoing intercarrier compensation reform proceeding.[37]

While the FCC considers long-term reforms to the intercarrier compensation system, CTIA has asked the Commission to address a petition filed in May 2002 by Sprint Corporation (Sprint), asking the Commission clarify that wireless carriers, under existing federal statutes, Commission rules, and more than twenty years of precedent, may designate separate rating and routing points for the exchange of local traffic, enabling wireless carriers to offer local telephone numbers and calling to customers in rural markets.[38] Just as the Commission is looking for more ways to encourage wireless deployment in rural areas,[39] incumbent LECs – particularly those located in rural areas –

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36 *See, e.g.*, Letter from Steve Largent, CTIA-The Wireless Association™, to Marlene H. Dortch, FCC, filed November 29, 2004.

37 *See In the Matter of Developing a Unified Compensation Regime*, CC Docket No. 01-92, Further Notice of Proposed Rulemaking, FCC 05-33 (released March 3, 2005).

38 *See In the Matter of Sprint Corp. Petition for Declaratory Ruling Regarding the Routing and Rating of Traffic by ILECs*, CC Docket No. 01-92 (filed May 9, 2002); *see also* Letter from Paul Garnett, CTIA-The Wireless Association™, to Marlene H. Dortch, FCC, filed March 8, 2005.

39 *See In the Matter of Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies to*

are unlawfully placing conditions or are outright refusing to load wireless carrier numbers into their switches when wireless carriers choose lawful and efficient indirect interconnection with those incumbent LECs. Sprint is asking the Commission to issue a narrow ruling that would state, in part, that: (1) Indirect interconnection is expressly permitted by section 251 of the Act and wireless carriers are permitted by law to exchange traffic with rural incumbent LECs indirectly;[40] (2) as required by the Local Number Portability Rules, wireless carriers may assign local numbers to rate centers in which they provide service;[41] and (3) the local dialing parity rules prohibit rural incumbent LECs from requiring their own customers to make 1+ calls to reach wireless customers with numbers in the same exchange.[42]

The Commission's continued failure to clarify these points makes it infeasible for wireless carriers to serve consumers in certain rural areas served by rural incumbent LECs – even when the wireless carrier has wireless facilities in these rural areas and is serving urban consumers who travel through those areas. More importantly, the Commission's continued inaction on the Sprint petition is denying many rural consumers the same array of competitive alternatives available to consumers in urban areas.

Provide Spectrum-Based Services, WT Docket Nos. 02-381, 01-14, 03-202, Report and Order and Further Notice of Proposed Rulemaking (released Sep. 27, 2004).

40 *See* 47 U.S.C. § 251(a), (c); *see also* 47 C.F.R. § 20.11(a).

41 *See* 47 C.F.R. § 51.15.

42 *See* 47 C.F.R. § 51.207.

II. Consumer Behavior in the Mobile Telecommunications Market

A. Access to Information: How Wireless Consumers Are Informed about Wireless Service and Companies

Mark Lowenstein, principal of Mobile Ecosystem, observed in a paper recently filed with the California Public Utilities Commission:

> We are seeing some important improvements in how consumers are informed about, acquire, and manage their wireless services. Web site and in-store literature is very clear about price plans and other options. Pricing plans are fewer and less complex, now that additional charges for roaming, peak/off-peak, and long distance (LD) have become less prevalent. In fact, some 40% of wireless subscribers are now on a rate plan that includes nationwide roaming and long-distance. Additionally, wireless carriers have also developed sophisticated on-line tools to provide more efficient and user-friendly self-care options - from checking minute usage to signing up for new services or paying bills, to which users have responded positively. Data from Compete, Inc. shows rapid growth in the number of subscribers researching and buying their wireless services on-line, as well as using the Web for bill paying, account management, and personalization.[43]

Carriers' websites (whether Tier I, II or III operators) show the variety of services, options, and pricing plans available to consumers. In addition, websites such as www.MountainWireless.com provide reviews of service, coverage, and more, while websites like www.myrateplan.com also provide the ability to compare different carriers'

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[43] Mark Lowenstein, *An Update on the State of Wireless Industry Growth, Competition, and Innovation,* appended to *Petition of Cingular Wireless. LLC, Cricket Communications, Inc., Nextel of California Inc., Omnipoint Communications, Inc., dba T-Mobile, Sprint Telephony PCS, L.P., Sprint Spectrum L.P. as agent for Wireless Co., L.P. dba Sprint PCS, Verizon Wireless, Western Wireless and CTIA-The Wireless Association for Modification of Decision 04-05-047,* CPUC Rulemaking 00-02-004 (January 6, 2005).

rate plans and options.[44] In the case of www.myrateplan.com, this includes at least one MVNO, Liberty Wireless, as well as traditional facilities-based licensees.

Wireless companies have also voluntarily adopted a Code of Conduct that helps guide carrier employees interfacing with customers and would-be customers to maximize the information disclosed to consumers, including guidelines for helping consumers make informed choices when selecting wireless service and for ensuring that consumers understand their wireless service and rate plans. Carriers are required to be re-certified as complying with all elements of the voluntary code on an annual basis.[45] More data is now available to consumers regarding their options, and more contact information has been provided to assist them in resolving any issues which they have (including contact information both for carrier representatives, and contact information for state and federal regulators).

B. Customer Exercise of Choice

Churn, or the disconnection of a customer from one service provider (either at the volition of the customer, or of the carrier) is regarded as another measure of customer satisfaction, although it may more properly be viewed as a measure of customer volition.[46] With the initial implementation of wireless local number portability in

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44 *See e.g.,* the Mountain Wireless website, which includes links to similar pages at http://www.mountainwireless.com/links.htm.

45 *See* http://www.ctia.org/wireless_consumers/consumer_code/index.cfm.

46 As Merrill Lynch has observed, customer "churn is defined as the ratio of customers discontinuing service relative to the total average subscribers for the period on a monthly basis." David Janazzo, *et al.*, "US Wireless Services," US Wireless Matrix 4Q 04," *op cit*., at 44.

November 2003, and its broader implementation in May 2004, there was an expectation that churn would dramatically increase. While some carriers did experience an uptick in churn, the increase soon moderated and "trended downward. In fact, number portability became simply another option in the competitive marketplace."[47] While carriers advertised to attract new customers from their rivals, they also acted to provide incentives for customers to remain on their networks. The result was that while some ten million customers changed their wireless service providers and ported their numbers, overall the percentage of wireless customers churning did not dramatically vary from percentages in preceding years. Notably, over 800,000 wireline customers did port their numbers to wireless carriers, while a relative handful ported their wireless numbers to wireline carriers.[48]

III. Market Performance

A. Subscriber Growth

In 2004, overall wireless subscribership grew by more than 22 million net new customers. This is the second largest growth in wireless subscribership in any one year since the wireless industry began. Even more significant is the fact that *the net adds in 2004 alone are double the number of customers that the wireless industry had reached after ten years of existence.* Clearly, the wireless industry offers something that people value – the ability to keep in touch, while mobile, is only one of its attractions. This

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47 *Id.* at 1 and 14 (Table 8: Monthly Churn).

48 *See* "Numbering Resource Utilization in the United States, as of June 30, 2004," FCC Wireline Competition Bureau, Industry Analysis & Technology Division, released March 1, 2005, at Table 14, at http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/utilizationjun2004.pdf.

adoption of wireless service by consumers and business has occurred across the country, and throughout age and demographic groups.

For example, in 2004, the Bureau of Labor Statistics found that 50.5% of rural households have wireless service, versus 53.5% of urban households.[49] CTIA's analysis of the Commission's "Economic Areas" data included in the *Ninth Report* concluded that 51.13% of consumers living in rural areas had wireless phones in 2004, versus 53.9% of all Americans nationwide. Since then, nationwide subscriber penetration has risen to more than 60 percent.

While CTIA itself has not tracked penetration by demographic group, companies like Scarborough Research *have* surveyed usage patterns among different ethnic groups.[50] The Yankee Group was also recently cited for their findings to the effect that more than 40 percent of Americans between 10 and 18 have wireless phones.[51] A *New York Times* article noted the relative percentages of those having wireless phones in various age ranges: 19 to 64 (almost 80 percent), 65 to 74 (about 50 percent), 75 to 84 (about 30 percent), and 85 or older (about 18 percent).[52] The National Telecommunications Cooperative Association (NTCA) has also conducted surveys which found that teen

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49 Data *cited in* Joseph S. Kramer, *et al*., "The Myths and Realities of Universal Service: Revisiting the Justification for the Current Subsidy Structure," PFF, January 2005, at 17 and 121.

50 *See e.g*., "Hispanics' Cellular Bills Are 10% Higher Than The National Average," Scarborough Press Release, February 18, 2004, at www.scarborough.com, press releases. This release also notes penetration rates among Hispanics 18 and older in 23 markets across the United States.

51 Jeffrey Selingo, "No Longer Just for Emergencies," *The New York Times*, at E1 and E6.

52 *Id.*

usage of wireless in rural areas exceeds the national average.[53] Mobile Virtual Network Operators (MVNOs) such as Virgin Mobile USA, and the Nextel-affiliated Boost Mobile, are pursuing strategies aimed at appealing to the youth market, with more than a little success. Virgin Mobile USA reportedly has more than 3 million subscribers, the majority of whom (70 percent) sent or received text messages last year, or used non-voice data services (60 percent).[54] Boost has more than 1.2 million subscribers.[55] Just this month at CTIA's Wireless 2005 convention, Sean Combs (P. Diddy) announced that he's launching an MVNO, "It's all about cell phones . . . I do have subscribers . . .tens of millions of them, and . . . I am an MVNO. "[56]

B. Minutes of Use and Mobile Data: Increasing Consumption

With the growth in overall subscribership has also come growth in the consumption of voice minutes and in other, non-voice services, including a range of data services. Wireless companies throughout the United States are offering their customers short message service (SMS), ring-tones and game downloads, e-mail and office systems

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53 *See e.g.*, "2004 Rural Youth Telecommunications Survey: Teen Preferences Create New Windows of Opportunity for Rural Telecom Carriers," Foundation for Rural Service, NTCA, 2004, at 2 (reporting 86 percent of rural youth have wireless phones by contrast with 56 percent of youth nationwide). *See also* "Teenagers Connected by Convenience of Cellphones," at http://www.newstarget.com/002682.html; *and see* Jason Gertzen, "A Boost in Wireless Teens?" *Kansas City Star*, February 19, 2005.

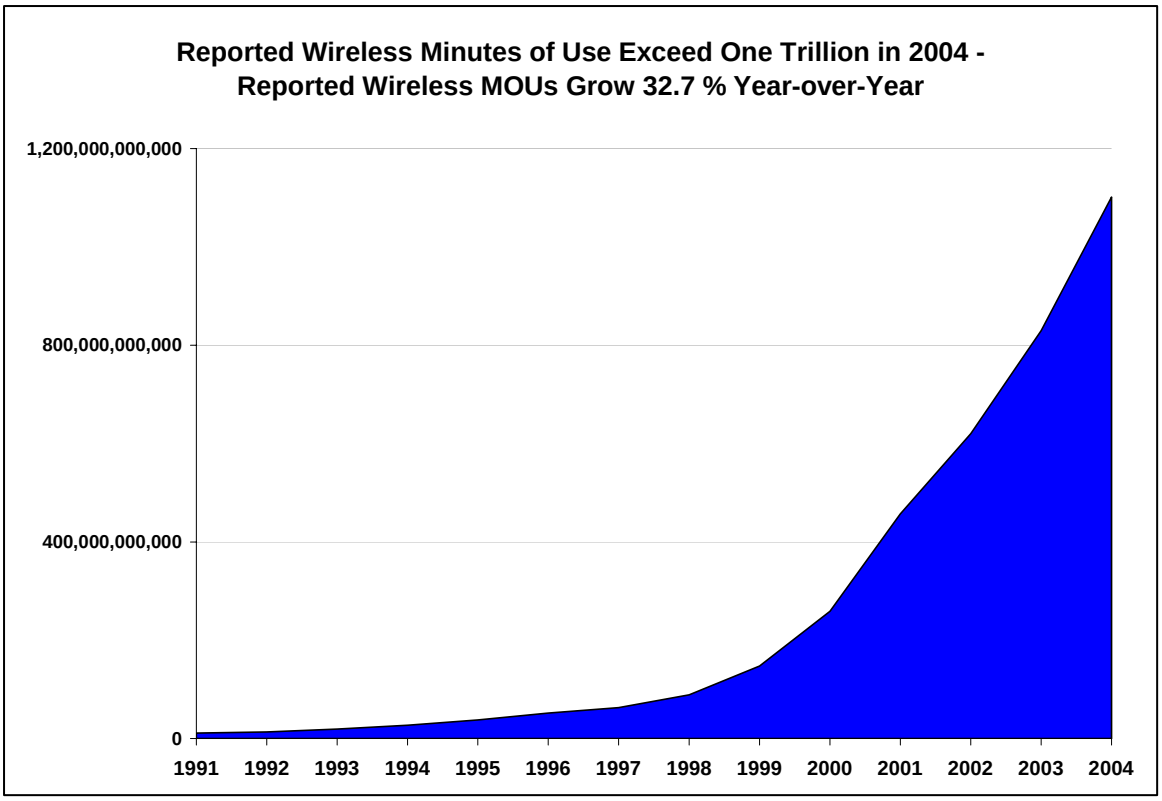
54 *See* "Virgin Mobile USA tops 3M subs," *RCR Wireless News*, February 14, 2005.

55 *See* Jason Gertzen, "A Boost in Wireless Teens?" *Kansas City Star*, February 19, 2005.

56 Notable Quote, *RCR Wireless News*, March 21, 2005, at 1.

access, photo-messaging and web-browsing capabilities, as well as traditional voice services.

It is worth noting that while the average local monthly bill for wireless customers rose 1.5 percent from December 2003 to December 2004, *the number of voice minutes consumed by the average user rose by 15 percent over the same period*.[57] And the average local monthly bill covers not only voice minutes, but also includes new non-voice services, such as SMS, noted above.

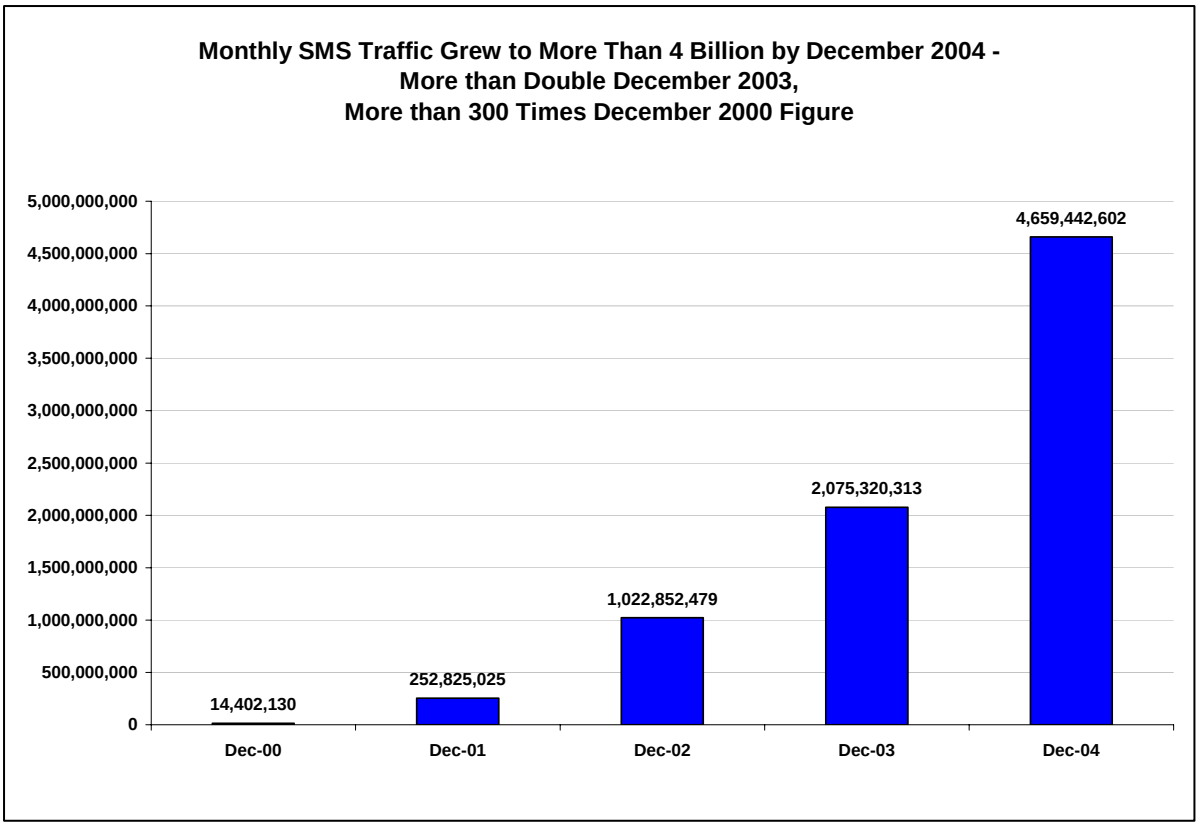


CTIA's semi-annual survey has documented that in 2003 as a whole, wireless customers used 829 billion minutes of service. In 2004, wireless customers used more

57 *See CTIA Wireless Industry Indices* report, year-end 2004 edition (forthcoming) at Section 1.1 (High Level Snapshot of Year-End Data).

than 1.1 trillion minutes of service. In the month of December 2003, alone, wireless customers exchanged 2 billion SMS messages. In the month of December 2004, wireless customers exchanged more than 4.6 billion SMS messages. These are striking figures – in fact, while the above figures show that wireless customers consumed another 271 billion minutes in 2004 than they did in 2003 – that *incremental* usage was more than the 259 billion wireless minutes that constituted *all* of the minutes wireless customers used in 2000. Wireless companies are doing something right by wireless consumers – and consumers are recognizing that fact by using more amounts of traditional wireless services, and adopting new service offerings, from SMS to picture-messaging, and various entertainment features. In fact, the hard work of the wireless industry in establishing interoperability for SMS messaging made possible the extraordinary growth of SMS – from just 14 million messages a month in December 2000 to more than 4.6 billion a month as of December 2004. Recent announcements at CTIA Wireless 2005™ by some carriers about the establishment of MMS interoperability lays the foundation for consumers to exchange MMS messages across carriers as readily as they now exchange SMS messages.[58]

[58] *See e.g.,* Michael Adler, "Top US Carriers Announce MMS Interoperability," March 16, 2005, at http://www.mobileburn.com/news.jsp?Id=1256&source=SIDEBARHOME.



Even prior to MMS interoperability, it had been reported that 12 percent of U.S. households had a camera phone last year, up from 2.5 percent of U.S. households in 2003.[59] The introduction of mobile TV or mobile video services also reflects the on-going innovations being pursued by carriers of all sizes.[60] Mobile entertainment overall is projected to grow from $187.5 million in 2003 to more than $3.8 billion by 2008.[61]

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59 *See* http://kansascity.bizjournals.com/kansascity/stories/2005/02/21/daily3.html.

60 Providers of mobile TV services and direct-to-mobile series include Cingular, Midwest Wireless, Sprint PCS, and Verizon Wireless. *See e.g.*, "Cingular launches mobile TV service," *Telegeography CommsUpdate*, January 26, 2005; Jason Stitt "Midwest Wireless adds live TV to list of cellular services," *Wisconsin Technology Network*, January 31, 2005, at http://www.wistechnology.com/article.php?id=1529; "'24: Conspiracy' From Fox Entertainment Group Available Exclusively in the U.S. to Verizon Wireless V CAST Customers; Worldwide Hit Television Series '24' Inspires Action-Packed 'Mobisodes'; Developed for Viewing on Wireless Phones," Verizon Wireless

C. Service Quality

Customer information and customer support are both relevant to issues of perceived service quality. As the Commission noted in the *Memorandum Opinion and Order* approving the Cingular – AT&T Wireless merger:

> The services provided by the mobile telephony carriers are differentiated on the following key bases: (1) quality, (2) coverage, and (3) plan features. Quality includes the probability of blocked and dropped calls, and the quality of the connection. Surveys by Telephia indicate that consumers place a high value on quality in making their choices of carriers and their decisions to switch carriers. Customer support is a separate but important dimension of service quality. Surveys indicate that customers also frequently cite this factor as important in their decisions to switch carriers.[62]

Carriers have been hiring and continue to hire personnel to improve the consumer experience. According to data from the U.S. Census Bureau, wireless carriers increased their customer service staffing by more than 25 percent from 2002 to 2003. Moreover, since 2003, wireless providers have announced the hiring of more customer service

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press release, February 1, 2005, at http://news.vzw.com/news/2005/01/pr2005-01-31.html; and http://www.mobitv.com/get/sprintpcs.html.

61 *See* Robert Luke, "Ringing up serious sales; Personalizing cellphones a new trend," Atlanta Journal-Constitution,' January 8, 2005 (noting projected revenues from music, games, TV/films, graphics, and other interactive entertainment services).

62 *Memorandum Opinion and Order*, In the Matter of Applications of AT&T Wireless Services, Inc., and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations, at para. 124.

representatives, or have signed new agreements with third-party call center companies who are increasing their own staffing to handle wireless-related service questions.[63]

On February 11, 2005, the FCC released its First and Second Quarter 2004 reports on informal consumer inquiries and complaints. The reports found that actual complaint rate for wireless for the first quarter of 2004 was 0.0054 percent – just over five thousandths of one percent. At the start of 2004, the total number of complaints per million wireless subscribers was 54 per million. By contrast, for the second quarter 2004, the total complaint rate was 0.0042 percent – just over four-thousandths of one percent – equal to 42 complaints per million customers.[64] On March 4, 2005, the FCC released its Third and Fourth Quarter 2004 reports on informal complaints. Although complaints rose in the third quarter, complaints fell sharply at the end of 2004, to the lowest rate in six quarters, to 0.0024 percent – equal to 24 complaints per million customers. *On an annual basis, service quality-related complaints in 2004 actually amounted to less than*

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63 *See e.g.*, Kevin Wack, "T-Mobile To Build Telecom Call Center, Add 700 Jobs in Oakland, Maine," *Portland Press Herald*, November 20, 2004; "To handle Growing Demand, Call Center to Hire 200," *AP*, Sept. 18, 2004 (DecisionOne announces hiring of wireless support representatives); Diane Velasco, "Call Center Firm Hiring in Vegas, Moriarty," *Albuquerque Journal*, Aug. 14, 2004 (Connection hiring wireless customer support personnel); and "Verizon Wireless to Add Employees," *Reading Eagle*, July 29, 2004 (announcing customer support hiring initiative).

64 In fact, the FCC's latest reports on informal consumer complaints show that *the total number of wireless-related complaints for the second quarter 2004 fell by 18.9 percent from the first quarter of 2004*. And number portability-related complaints fell by 66.4 percent from the first to the second quarter. *See* FCC Consumer & Governmental Affairs Bureau "Report on Informal Consumer Inquiries and Complaints, Second Quarter Calendar Year 2004," released February 11, 2005. *See also* FCC Consumer & Governmental Affairs Bureau "Report on Informal Consumer Inquiries and Complaints, First Quarter Calendar Year 2004," released February 11, 2005.

two-thousandths of one percent of customers, equal to about 17 complaints per one million customers.

IV. Wireless As An Economic Driver

Data available from a wide variety of public sources demonstrates that the competitive wireless industry – that wireless technology – is a tremendous engine for growing the economy. Economic benefits directly flow from the wireless industry's continued growth. These benefits have been broadly calculated by analysts to include the high technology employment and payrolls of wireless manufacturers, as well as the "hot house" effect of research and development, and the consumer surplus associated with the multiple wireless products and services now enjoyed by more and more people for personal and professional purposes.[65] From the more than 225,000 people directly employed by facilities-based licensees, through the indirect jobs which exist both upstream (in the developer and equipment / accessory manufacturing and supplier community) and downstream (in the retail, resale, and related support systems fields), the wireless industry has created hundreds of thousands of jobs across the United States. The wireless industry's service providers alone generate more than $9 billion in payroll every

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65 *See e.g.*, "California's Wireless Wonders," O'Melvery / San Diego Regional Technology Alliance, 2002, at http://www.systemsupportsolutions.com/WhitePapers/WirelessReport.pdf, and "The Economic Impact of Third-Generation Wireless Technology," Council of Economic Advisors, October 2000 (CEA 2000 Report) at 11-12 (describing spillover benefits of economic clusters in high technology fields).

year, as well as invest in upgrading existing facilities and building-out new facilities with new generations of wireless technology.[66]

Social benefits also flow from the economic success of the wireless industry. Declining prices per minutes, rapid increases in availability of cutting edge services and devices, and more than 70 million wireless 911 calls made every year – these are just some of the benefits the robust and competitive wireless industry provides to U.S. consumers.[67]

CONCLUSION

With multiple service providers available to effectively all Americans, the on-going investment in and build-out of wireless systems, the almost monthly introduction of new service options, multiple pricing plans, declining prices, and the concomitant increase in minutes used by consumers, the wireless industry – and the wireless marketplace – is clearly delivering effective competition, and competitive benefits, to consumers.

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66 *See* CTIA Semi-Annual Wireless Industry Survey at http://www.ctia.org/research_statistics/statistics/index.cfm/AID/10030. *See also* payroll data which may be extracted from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages for NAICS 517212 (cellular and other wireless carriers), at http://data.bls.gov/PDQ/outside.jsp?survey=en.

67 *See* "Progress Report: Growth and Competition in U.S. Telecommunications, 1993-1998," Council of Economic Advisors, February 8, 1999 (promoting technology innovation, investment, and consumer choice); CEA 2000 Report ("benefits of technological innovation accrue to the consumers who use the new technology, the producers who provide it, and other firms that supply complementary goods and services"); Jerry Hausman "Mobile Telephone," in M.E. Cave (ed.) Handbook of Telecommunications Economics (Elsevier Science, 2002) at 589-91 (noting the costs to consumers and the economy of regulatory delay in licensing wireless service); CTIA statistics on "Wireless 9-1-1 and Distress Calls," at http://www.ctia.org/public_policy/statistics/index.cfm/AID/216, etc.

CTIA hopes that the information provided in these comments assists the Commission in preparing its *Tenth Annual CMRS Competition Report*.

Respectfully submitted,

/s/ Robert F. Roche
Robert F. Roche, Ph.D.
Vice President, Research

Michael F. Altschul
Senior Vice President and General Counsel

Carolyn W. Brandon
Vice President, Policy

CTIA-THE WIRELESS ASSOCIATION™
1400 Sixteenth Street, N.W.
Suite 600
Washington, D.C. 20036
(202) 785-0081

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